

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

Insured: J&S Welding
Property: 2579 N 9th Avenue
Humboldt, TN 38343

Claim Number:

Policy Number:

Type of Loss: <NONE>

Date of Loss:

Date Received:

Date Inspected:

Date Entered: 6/25/2021 11:13 PM

Price List: TNJA8X_JUN21
Restoration/Service/Remodel
Estimate: 2579_N9THAVE

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2579_N9THAVE**General Conditions**

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
1. Taxes, insurance, permits & administration fees*	1.00 EA	6,088.92	0.00	1,217.78	7,306.70	(0.00)	7,306.70
1.5% of valuation of project							
230. Engineering Fees*	1.00 EA	13,564.74	0.00	2,712.94	16,277.68	(0.00)	16,277.68
Engineering - 3% of valuation of project							
3. R&R Sheathing - plywood - 1/2" CDX	256.00 SF	2.69	38.44	145.42	872.50	(0.00)	872.50
Plywood for placement under dumpster to prevent damage to the driveway.							
5. Cleaning Technician - per hour	60.00 HR	30.79	0.00	369.48	2,216.88	(0.00)	2,216.88
Daily and final cleaning of the jobsite.							
6. Telehandler/forklift (per day) - no operator	14.00 DA	447.91	0.00	1,254.14	7,524.88	(0.00)	7,524.88
7. Equipment Operator - per hour	140.00 HR	49.08	0.00	1,374.24	8,245.44	(0.00)	8,245.44
8. Commercial Supervision / Project Management - per hour	200.00 HR	59.05	0.00	2,362.00	14,172.00	(0.00)	14,172.00
11. Install Temporary toilet (per month)	1.00 MO	115.00	0.00	23.00	138.00	(0.00)	138.00
<i>Due to the Pandemic for the safety of the homeowner and workers an outdoor portable toilet is mandatory.</i>							
12. Clean toilet	20.00 EA	16.39	0.08	65.58	393.46	(0.00)	393.46
225. Delivery charge (Bid Item) Temporary Toilet*	2.00 EA	95.00	0.00	38.00	228.00	(0.00)	228.00
231. Job-site cargo/storage container - 20' long - per month	2.00 MO	87.83	17.13	38.56	231.35	(0.00)	231.35
Totals: General Conditions			55.65	9,601.14	57,606.89	0.00	57,606.89

OSHA

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
*****Safety Requirements for Occupants and Employees*****							
13. Fall protection harness and lanyard - per day	120.00 DA	8.00	0.00	192.00	1,152.00	(0.00)	1,152.00
Fall protection for 6 workers for 20 days							
1926.501(b)(1)							
"Unprotected sides and edges." Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.							
14. Caution tape	1,500.00 LF	0.08	1.46	24.30	145.76	(0.00)	145.76
15. Temporary fencing - 1-4 months (per month)	300.00 LF	2.10	0.00	126.00	756.00	(0.00)	756.00
16. Traffic cones (per unit, per day)	300.00 DA	0.83	0.00	49.80	298.80	(0.00)	298.80
131. Material Only Protection netting*	6,285.52 SF	1.75	1,072.47	2,414.44	14,486.57	(0.00)	14,486.57

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CONTINUED - OSHA

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
Netting to keep building materials from falling into the building while the shop is open.							
<i>OSHA 1926.105(a)</i> Safety nets shall be provided when workplaces are more than 25 feet above the ground or water surface, or other surfaces where the use of ladders, scaffolds, catch platforms, temporary floors, or safety belts is impractical.							
<i>1926.105(b)</i> Where safety net protections is required by this part, operations shall not be undertaken until the net is in place and has been tested.							
<i>1926.105(c)</i> <i>1926.105(c)(1)</i> Net shall extend 8 feet beyond the edge of the work surface where employees are exposed and shall be installed as close under the work surface as practical but in no case more than 25 feet below such work surface. Nets shall be hung with sufficient clearance to prevent user's contact with the surfaces or structures below. Such clearance shall be determined by impact load testing.							
133. General Laborer - per hour	224.00 HR	33.48	0.00	1,499.90	8,999.42	(0.00)	8,999.42
Labor to install and remove protection netting							
18. Onsite Safety Supervisor*	200.00 HR	85.00	0.00	3,400.00	20,400.00	(0.00)	20,400.00
<i>Onsite Safety Inspector as Required by OSHA. 10 hours per day for the length of 4 week project.</i>							
<i>1926.502(h)</i> Safety monitoring systems." Safety monitoring systems [See 1926.501(b)(10) and 1926.502(k)] and their use shall comply with the following provisions:							
<i>1926.502(h)(1)</i> The employer shall designate a competent person to monitor the safety of other employees and the employer shall ensure that the safety monitor complies with the following requirements:							
<i>1926.502(h)(1)(i)</i> The safety monitor shall be competent to recognize fall hazards;							
<i>1926.502(h)(1)(ii)</i> The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;							
<i>1926.502(h)(1)(iii)</i> The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored;							
<i>1926.502(h)(1)(iv)</i> The safety monitor shall be close enough to communicate orally with the employee; and							
<i>1926.502(h)(1)(v)</i> The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.							
19. Scissor lift - 26' platform height (per day)	20.00 DA	193.00	0.00	772.00	4,632.00	(0.00)	4,632.00
20. Respiration*	1.00 EA	45.00	0.00	9.00	54.00	(0.00)	54.00

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CONTINUED - OSHA

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
1910.134(a) Permissible practice.							
1910.134(a)(1) In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section.							
1910.134(a)(2) A respirator shall be provided to each employee when such equipment is necessary to protect the health of such employee. The employer shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program, which shall include the requirements outlined in paragraph (c) of this section. The program shall cover each employee required by this section to use a respirator.							
21. Ear Plugs, Disposable*	1.00 EA	60.00	0.00	12.00	72.00	(0.00)	72.00
OSHA 1926.52, 1926.101 Ear protection devices must be provided and used wherever it is not feasible to reduce noise levels or where a deviation to exposure levels specified in Table D-2, permissible noise exposure exists.							
22. Head Protection*	80.00 EA	16.00	0.00	256.00	1,536.00	(0.00)	1,536.00
OSHA 1926.100 Protective helmets (hard hats) must be worn at all times where there is a possible danger of head injury from impact, falling, or flying objects, or electrical shocks and burns.							
23. R&R 10 lb. ABC fire extinguisher	2.00 EA	102.15	18.25	44.52	267.07	(0.00)	267.07
OSHA 1926.152(g)(11) At least one portable fire extinguisher with a rating of not less than 2--B:C must be located within 75 feet of each pump, dispenser, underground fill pipe opening and lubrication or refueling service area							
24. Signaling - General Laborer - Per Hour*	20.00 EA	30.00	0.00	120.00	720.00	(0.00)	720.00
OSHA 1926.200(a), OSHA 1926.200(g)(2) Accident prevention signs and tags must be visible at all times when work is being performed and/or removed or covered promptly when the hazard no longer exists. Traffic control signs or devised used for workers' protection must conform with Part IV of the Manual of Uniform Traffic Control Devices (MUTCD) 1988 edition revision 3 or Part VI of the MUTCD Millennium edition							
25. Protection of employees *	40.00 HR	100.00	0.00	800.00	4,800.00	(0.00)	4,800.00


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CONTINUED - OSHA

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
1926.416(a) Protection of employees - 1926.416(a)(1) No employer shall permit an employee to work in such proximity to any part of an electric power circuit that the employee could contact the electric power circuit in the course of work, unless the employee is protected against electric shock by deenergizing the circuit and grounding it or by guarding it effectively by insulation or other means.							
1926.416(a)(2) In work areas where the exact location of underground electric powerlines is unknown, employees using jack-hammers, bars, or other hand tools which may contact a line shall be provided with insulated protective gloves.							
1926.416(a)(3) Before work is begun the employer shall ascertain by inquiry or direct observation, or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. The employer shall post and maintain proper warning signs where such a circuit exists. The employer shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken.							
.1926.416(b) Passageways and open spaces - Barriers or other means of guarding shall be provided to ensure that workspace for electrical equipment will not be used as a passageway during periods when energized parts of electrical equipment are exposed.							
26. Electrical (Bid Item) Tags*	20.00 EA	100.00	0.00	400.00	2,400.00	(0.00)	2,400.00
1926.417(a) Controls. Controls that are to be deactivated during the course of work on energized or deenergized equipment or circuits shall be tagged.							
1926.417(b) Equipment and circuits. Equipment or circuits that are deenergized shall be rendered inoperative and shall have tags attached at all points where such equipment or circuits can be energized.							
27. Debris chute hopper - per week - 30" x 4' section	16.00 WK	30.05	0.00	96.16	576.96	(0.00)	576.96
28. Barricade Work Area from falling objects*	4.00 EA	100.00	0.00	80.00	480.00	(0.00)	480.00
Totals: OSHA			1,092.18	10,296.12	61,776.58	0.00	61,776.58

Emergency Repairs

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
145. Roofing (Bid Item) - Schrocks Roofing*	1.00 EA	15,200.00	0.00	3,040.00	18,240.00	(0.00)	18,240.00
 - See image, Emergency Repair Invoice, in the Images section of this report.							
Totals: Emergency Repairs			0.00	3,040.00	18,240.00	0.00	18,240.00

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Debris Removal

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
226. Dumpster load - Approx. 40 yards, 7-8 tons of debris	8.00 EA	613.46	0.00	981.54	5,889.22	(0.00)	5,889.22
227. General Laborer - per hour	160.00 HR	37.14	0.00	1,188.48	7,130.88	(0.00)	7,130.88
<i>Additional labor for cutting metal to fit in dumpster. 2 guys for 40 hours for 2 weeks</i>							
Totals: Debris Removal			0.00	2,170.02	13,020.10	0.00	13,020.10

Pollutant Clean Up

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
232. Paint Purlins to inhibit Rust spreading - two coats*	6,258.28 SF	2.15	164.75	2,724.02	16,344.07	(0.00)	16,344.07
Line item quantity adjusted to reflect actual quantity. (Corrected Typo)							
233. Soda blasting	5,464.00 SF	2.01	367.59	2,270.04	13,620.27	(0.00)	13,620.27
Totals: Pollutant Clean Up			532.34	4,994.06	29,964.34	0.00	29,964.34

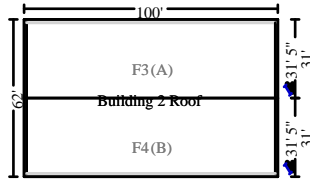
Business Personal Property

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
234. Iron Crafter - 30/30 30 ton *	1.00 EA	60,200.00	0.00	0.00	60,200.00	(0.00)	60,200.00
Fabrication Table - 6,500.00							
30 Ton Iron Crafter Iron Worker w/ tooling - 12,400							
Snap -On Tool Box - 3,500							
Misc. Radial arm drill tooling bits and chucks - 12,800							
Misc. Tools - 25,000							
Total - 60,200							
Totals: Business Personal Property			0.00	0.00	60,200.00	0.00	60,200.00

2579_9th

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**Building 2 Roof**

6285.52 Surface Area
 325.71 Total Perimeter Length

62.86 Number of Squares
 100.00 Total Ridge Length

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
29. Remove Metal roofing	6,285.52 SF	0.72	0.00	905.12	5,430.69	(0.00)	5,430.69
31. Metal roofing	6,285.52 SF	3.58	741.53	4,648.74	27,892.43	(0.00)	27,892.43
30. R&R Closure strips for metal roofing - inside and/or outside	400.00 LF	2.03	19.89	166.38	998.27	(0.00)	998.27
32. R&R Eave trim for metal roofing - 29 gauge	200.00 LF	3.80	25.16	157.04	942.20	(0.00)	942.20
33. R&R Gable trim for metal roofing - 29 gauge	65.33 LF	4.62	13.44	63.04	378.30	(0.00)	378.30
173. R&R Ridge end cap for metal roofing	1.00 EA	28.03	1.25	5.88	35.16	(0.00)	35.16
34. Roofing felt - 30 lb.	62.86 SQ	23.81	64.84	312.30	1,873.84	(0.00)	1,873.84
35. Battens - 2x4 - for steel roofing	62.86 SQ	192.79	803.25	2,584.42	15,506.45	(0.00)	15,506.45
36. R&R Vinyl-faced/laminated insulation - 4"	6,285.52 SF	1.52	496.40	2,010.08	12,060.47	(0.00)	12,060.47
37. R&R Vinyl-faced/laminated insulation - 2"	6,285.52 SF	1.02	196.11	1,321.46	7,928.80	(0.00)	7,928.80
38. R&R Ridge cap - metal roofing	100.00 LF	5.69	21.74	118.14	708.88	(0.00)	708.88
39. R&R Exhaust cap - through roof - 6" to 8"	1.00 EA	73.85	3.34	15.42	92.61	(0.00)	92.61
40. R&R Neoprene pipe jack flashing for metal roofing	2.00 EA	50.16	4.26	20.92	125.50	(0.00)	125.50
41. Remove Additional charge for high roof (2 stories or greater)	62.86 SQ	7.65	0.00	96.18	577.06	(0.00)	577.06
42. Additional charge for high roof (2 stories or greater)	62.86 SQ	10.30	0.00	129.50	776.96	(0.00)	776.96
92. Butyl tape / sealing metal roofing panels for low slopes	2,205.00 LF	0.59	25.80	265.36	1,592.11	(0.00)	1,592.11
Totals: Building 2 Roof			2,417.01	12,819.98	76,919.73	0.00	76,919.73


Front Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
96. Remove Wall/roof panel - corrugated - 26 gauge	1,616.00 SF	0.71	0.00	229.48	1,376.84	(0.00)	1,376.84
43. Wall/roof panel - corrugated - 26 gauge	1,616.00 SF	3.51	226.89	1,179.82	7,078.87	(0.00)	7,078.87
128. Remove Metal J trim - metal building	61.00 LF	1.02	0.00	12.44	74.66	(0.00)	74.66

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CONTINUED - Front Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
129. Metal J trim - metal building	61.00 LF	4.80	6.96	59.96	359.72	(0.00)	359.72
Line item unit price adjusted to reflect current market conditions.							
https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHFY7ytN9uDwbkPv4KYsAU&oeq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAYBQghEKABMgUIIRCgATIFCCEQoAE6CAGAEKIEELADOggIIRAWEB4QHToKCCEQFhAeEB0QGDofCCEQqwI6BwghEKABEApKBAhBGAFQrA5YmjBgiT1oAXAAeACAAZABiAHGCZIBBDaUMTCYAQCgAQHIAQHAAQE&scient=products-cc#spd=250132952231869107							
146. R&R Wrap wood garage door frame & trim with aluminum (PER LF)	88.00 LF	14.70	28.57	264.44	1,586.61	(0.00)	1,586.61
47. Remove Vinyl-faced/laminated insulation - 4"	1,616.00 SF	0.22	0.00	71.10	426.62	(0.00)	426.62
97. Vinyl-faced/laminated insulation - 4"	1,616.00 SF	1.08	127.62	374.58	2,247.48	(0.00)	2,247.48
136. Insulation - ISO board, 1 1/2"	16.16 SQ	233.75	117.22	778.92	4,673.54	(0.00)	4,673.54
 - See image, IECC Table, in the Images section of this report. Required to meet current IECC requirements for metal buildings							
125. R&R Coiling overhead door, 12' x 16'	2.00 EA	4,143.01	309.47	1,719.10	10,314.59	(0.00)	10,314.59
Line item unit price adjusted to reflect current market conditions. Including current shipping rate							
https://www.doorson-line.com/models/commercial							
126. Door Installer/Finish Carpenter - per hour	20.00 HR	57.50	0.00	230.00	1,380.00	(0.00)	1,380.00
Additional labor required to install balance and calibrate motors for new overhead doors.							
45. R&R Gutter / downspout - box - aluminum - 7" to 8"	160.00 LF	18.38	235.72	635.30	3,811.82	(0.00)	3,811.82
46. Electrician - per hour	10.00 HR	81.71	0.00	163.42	980.52	(0.00)	980.52
Allowance to detach and reset electrical to replace siding.							
Totals: Front Elevation			1,052.45	5,718.56	34,311.27	0.00	34,311.27


Right Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
147. Remove Wall/roof panel - corrugated - 26 gauge	1,116.00 SF	0.71	0.00	158.48	950.84	(0.00)	950.84
148. Wall/roof panel - corrugated - 26 gauge	1,116.00 SF	3.51	156.69	814.78	4,888.63	(0.00)	4,888.63
149. Remove Metal J trim - metal building	12.00 LF	1.02	0.00	2.44	14.68	(0.00)	14.68
150. Metal J trim - metal building	12.00 LF	4.80	1.37	11.80	70.77	(0.00)	70.77

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CONTINUED - Right Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
Line item unit price adjusted to reflect current market conditions.							
https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHFY7ytN9uDwbkPv4KYsAU&oq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAyBQghEKABMgUIIRCgATIFCCEQoAE6CAGAEKIEELADOGgIIRAWEB4QHToKCCEQFhAeEB0QGDofCCEQqWl6BwghEKABEApKBahBGAFQrA5YmjBgiT1oAXAAeACAAZABiAHGCZIBBDaUMTCYAQCgAQHIAQHAAQE&scient=products-cc#spd=250132952231869107							
172. R&R Outside/Inside corner - 26 gauge	16.00 LF	7.54	4.71	25.08	150.43	(0.00)	150.43
152. Remove Vinyl-faced/laminated insulation - 4"	1,616.00 SF	0.22	0.00	71.10	426.62	(0.00)	426.62
153. Vinyl-faced/laminated insulation - 4"	1,616.00 SF	1.08	127.62	374.58	2,247.48	(0.00)	2,247.48
154. Insulation - ISO board, 1 1/2"	16.16 SQ	233.75	117.22	778.92	4,673.54	(0.00)	4,673.54
 - See image, IECC Table, in the Images section of this report.							
Required to meet current IECC requirements for metal buildings							
157. R&R Gutter / downspout - box - aluminum - 7" to 8"	160.00 LF	18.38	235.72	635.30	3,811.82	(0.00)	3,811.82
158. Electrician - per hour	6.00 HR	81.71	0.00	98.06	588.32	(0.00)	588.32
Allowance to detach and reset electrical to replace wall panels.							
175. HVAC Technician - per hour	4.00 HR	85.07	0.00	68.06	408.34	(0.00)	408.34
Allowance to remove and install HVAC exhaust to replace wall panels.							
Totals: Right Elevation			643.33	3,038.60	18,231.47	0.00	18,231.47

Rear Elevation


DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
159. Remove Wall/roof panel - corrugated - 26 gauge	1,616.00 SF	0.71	0.00	229.48	1,376.84	(0.00)	1,376.84
160. Wall/roof panel - corrugated - 26 gauge	1,616.00 SF	3.51	226.89	1,179.82	7,078.87	(0.00)	7,078.87
161. Remove Metal J trim - metal building	61.00 LF	1.02	0.00	12.44	74.66	(0.00)	74.66
162. Metal J trim - metal building	61.00 LF	4.80	6.96	59.96	359.72	(0.00)	359.72
Line item unit price adjusted to reflect current market conditions.							

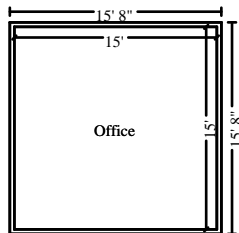
https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHFY7ytN9uDwbkPv4KYsAU&oq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAyBQghEKABMgUIIRCgATIFCCEQoAE6CAGAEKIEELADOGgIIRAWEB4QHToKCCEQFhAeEB0QGDofCCEQqWl6BwghEKABEApKBahBGAFQrA5YmjBgiT1oAXAAeACAAZABiAHGCZIBBDaUMTCYAQCgAQHIAQHAAQE&scient=products-cc#spd=250132952231869107

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CONTINUED - Rear Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
163. R&R Wrap wood garage door frame & trim with aluminum (PER LF)	88.00 LF	14.70	28.57	264.44	1,586.61	(0.00)	1,586.61
164. Remove Vinyl-faced/laminated insulation - 4"	1,616.00 SF	0.22	0.00	71.10	426.62	(0.00)	426.62
165. Vinyl-faced/laminated insulation - 4"	1,616.00 SF	1.08	127.62	374.58	2,247.48	(0.00)	2,247.48
166. Insulation - ISO board, 1 1/2"	16.16 SQ	233.75	117.22	778.92	4,673.54	(0.00)	4,673.54
 - See image, IECC Table, in the Images section of this report. Required to meet current IECC requirements for metal buildings							
167. R&R Coiling overhead door, 12' x 16'*	2.00 EA	4,143.01	309.47	1,719.10	10,314.59	(0.00)	10,314.59
Line item unit price adjusted to reflect current market conditions. Including current shipping rate							
https://www.doorson-line.com/models/commercial							
189. R&R Coiling overhead door, 10' x 10'*	1.00 EA	1,895.96	72.74	393.72	2,362.42	(0.00)	2,362.42
Line item unit price adjusted to reflect current market conditions. Including current shipping rate							
https://www.doorson-line.com/models/commercial							
168. Door Installer/Finish Carpenter - per hour	20.00 HR	57.50	0.00	230.00	1,380.00	(0.00)	1,380.00
Additional labor required to install balance and calibrate motors for new overhead doors.							
169. R&R Gutter / downspout - box - aluminum - 7" to 8"	160.00 LF	18.38	235.72	635.30	3,811.82	(0.00)	3,811.82
170. Electrician - per hour	10.00 HR	81.71	0.00	163.42	980.52	(0.00)	980.52
Allowance to detach and reset electrical to replace siding.							
176. General Laborer - per hour	20.00 HR	33.48	0.00	133.92	803.52	(0.00)	803.52
Additional labor required to move stack and store materials and shelving along rear elevation of building							
Totals: Rear Elevation			1,125.19	6,246.20	37,477.21	0.00	37,477.21

Interior**Office****Height: 8'**

480.00 SF Walls	225.00 SF Ceiling
705.00 SF Walls & Ceiling	225.00 SF Floor
25.00 SY Flooring	60.00 LF Floor Perimeter
60.00 LF Ceil. Perimeter	

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
2579_N9THAVE						1/16/2023	Page: 10

William Griffin, PA

William Griffin
 128 Poplar St.
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CONTINUED - Office

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
235. Drywall (Bid Item) Per Affordable Comstruction	1.00 EA	14,500.00	0.00	2,900.00	17,400.00	(0.00)	17,400.00
Totals: Office			0.00	2,900.00	17,400.00	0.00	17,400.00
Total: Interior			0.00	2,900.00	17,400.00	0.00	17,400.00

Interior**Interior**

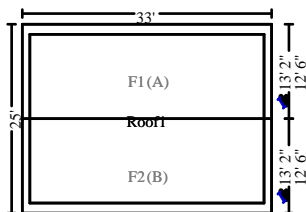
DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
Accessories							
138. Fluorescent light fixture - 6' & 8' - Detach & reset this is to detach and reset fluorescent lights on ceiling in shop.	20.00 EA	115.70	0.00	462.80	2,776.80	(0.00)	2,776.80
139. Outlet or switch - Detach & reset	32.00 EA	21.40	0.00	136.96	821.76	(0.00)	821.76
140. Remove Exhaust fan - Commercial - large	1.00 EA	19.10	0.00	3.82	22.92	(0.00)	22.92
171. Clean exhaust fan - Heavy (per side)*	2.00 EA	19.24	0.00	7.70	46.18	(0.00)	46.18
141. Install Exhaust fan - Commercial - large	1.00 EA	324.39	0.00	64.88	389.27	(0.00)	389.27
142. Detach & Reset Furnace - forced air - 100,000 BTU	2.00 EA	763.34	0.00	305.34	1,832.02	(0.00)	1,832.02
144. Lighting - General Laborer - per hour to remove replace and reinstall lighting	8.00 HR	48.89	0.00	78.22	469.34	(0.00)	469.34
76. Content Manipulation charge - per hour	50.00 HR	33.48	0.00	334.80	2,008.80	(0.00)	2,008.80
78. Scissor lift - 26' platform height (per day)	20.00 DA	193.00	0.00	772.00	4,632.00	(0.00)	4,632.00
221. R&R Breaker panel - 300 amp w/arc fault breakers	1.00 EA	3,175.67	200.67	675.28	4,051.62	(0.00)	4,051.62
223. Electrician - per hour Allowance for licensed electrician to test each circuit.	100.00 HR	81.71	0.00	1,634.20	9,805.20	(0.00)	9,805.20
229. Special Systems - Electrician - per hour Allowance for low voltage electrician to remove and install low voltage systems.	30.00 HR	81.71	0.00	490.26	2,941.56	(0.00)	2,941.56
Total: Interior			200.67	4,966.26	29,797.47	0.00	29,797.47

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
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Wall Panels

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
Begin Repairs							
105. Content Manipulation charge - per hour	120.00 HR	48.89	0.00	1,173.36	7,040.16	(0.00)	7,040.16
4 men,8 hours for 2 days to move tools, shelving, etc. out of shop before construction begins.							
106. Apply anti-microbial agent to the surface area	2,761.00 SF	0.29	10.77	162.30	973.76	(0.00)	973.76
Application of antimicrobial to the water damaged structural members							
Metal Wall Panel System							
108. Remove Wall/roof panel - ribbed - up to 1"*	2,761.00 SF	1.01	0.00	557.72	3,346.33	(0.00)	3,346.33
this is half of the shop wall							
109. Wall/roof panel - ribbed - up to 1"*	2,761.00 SF	9.25	869.51	5,281.76	31,690.52	(0.00)	31,690.52
this is half of the shop wall							
228. R&R Aluminum wall coping - large	262.00 LF	22.81	435.80	1,282.40	7,694.42	(0.00)	7,694.42
110. Caulking - butyl rubber	712.00 LF	4.03	31.24	580.12	3,480.72	(0.00)	3,480.72
112. Floor protection - cloth - skid resistant, breathable	6,200.00 SF	1.08	350.61	1,409.32	8,455.93	(0.00)	8,455.93
Allowance to protect concrete floor for painting phase of project.							
117. Clean concrete the surface area	6,200.00 SF	0.36	6.05	447.62	2,685.67	(0.00)	2,685.67
118. Concrete sealer - brush or spray applied	6,200.00 SF	1.10	465.47	1,457.10	8,742.57	(0.00)	8,742.57
121. R&R Wrap wood garage door frame & trim with aluminum (PER LF)	0.00 LF	13.61	0.00	0.00	0.00	(0.00)	0.00
122. Content Manipulation charge - per hour	64.00 HR	48.89	0.00	625.80	3,754.76	(0.00)	3,754.76
4 men,8 hours for 2 days to move tools, shelving, etc. back into shop when constructions complete.							
Totals: Wall Panels			2,169.45	12,977.50	77,864.84	0.00	77,864.84
Total: Interior			2,370.12	17,943.76	107,662.31	0.00	107,662.31
Total: 2579_9th			7,608.10	48,667.10	292,001.99	0.00	292,001.99

Detached Garage**Roof1**

869.63 Surface Area
118.70 Total Perimeter Length

8.70 Number of Squares
33.00 Total Ridge Length

William Griffin, PA

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DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
54. Remove Metal roofing	869.63 SF	0.45	0.00	78.26	469.59	(0.00)	469.59
55. R&R Closure strips for metal roofing - inside and/or outside	66.00 LF	2.03	3.28	27.44	164.70	(0.00)	164.70
56. Metal roofing	869.63 SF	3.58	102.59	643.18	3,859.05	(0.00)	3,859.05
57. R&R Eave trim for metal roofing - 29 gauge	66.00 LF	3.80	8.30	51.82	310.92	(0.00)	310.92
58. R&R Gable trim for metal roofing - 29 gauge	52.67 LF	4.62	10.84	50.84	305.02	(0.00)	305.02
59. Roofing felt - 30 lb.	8.70 SQ	23.81	8.97	43.24	259.36	(0.00)	259.36
60. Battens - 2x4 - for steel roofing	8.70 SQ	192.79	111.17	357.70	2,146.14	(0.00)	2,146.14
61. R&R Vinyl-faced/laminated insulation - 4"	869.63 SF	1.30	68.68	239.84	1,439.04	(0.00)	1,439.04
62. R&R Vinyl-faced/laminated insulation - 2"	869.63 SF	0.79	27.13	142.82	856.96	(0.00)	856.96
63. R&R Ridge cap - metal roofing	33.00 LF	5.69	7.18	39.00	233.95	(0.00)	233.95
64. R&R Exhaust cap - through roof - 6" to 8"	1.00 EA	68.83	3.34	14.42	86.59	(0.00)	86.59
65. R&R Neoprene pipe jack flashing for metal roofing	2.00 EA	45.73	4.26	19.14	114.86	(0.00)	114.86
66. Remove Additional charge for high roof (2 stories or greater)	8.70 SQ	4.70	0.00	8.18	49.07	(0.00)	49.07
67. Additional charge for high roof (2 stories or greater)	8.70 SQ	10.30	0.00	17.92	107.53	(0.00)	107.53
Totals: Roof1			355.74	1,733.80	10,402.78	0.00	10,402.78

Front Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
178. Remove Wall/roof panel - corrugated - 26 gauge	528.00 SF	0.71	0.00	74.98	449.86	(0.00)	449.86
179. Wall/roof panel - corrugated - 26 gauge	528.00 SF	3.51	74.13	385.48	2,312.89	(0.00)	2,312.89
180. Remove Metal J trim - metal building	30.00 LF	1.02	0.00	6.12	36.72	(0.00)	36.72
181. Metal J trim - metal building	30.00 LF	4.80	3.42	29.48	176.90	(0.00)	176.90

Line item unit price adjusted to reflect current market conditions.


https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHFY7ytN9uDwbkPv4KYsAU&oeq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAyBQghEKABMgUIIRCgATIFCCEQoAE6CAgAEKIEELADoggIIRAWEB4QHToKCCEQFhAeEB0QGDoFCCEQqWl6BwghEKABEApKBAhBGAFQrA5YmjBgiTlOAXAAeACAAZABiAHGCZIBBDAuMTCYAQCgAQHIAQHAAQE&sclient=products-cc&spd=250132952231869107

182. R&R Wrap wood garage door frame & trim with aluminum (PER LF)	30.00 LF	14.70	9.74	90.14	540.88	(0.00)	540.88
183. Remove Vinyl-faced/laminated insulation - 4"	528.00 SF	0.22	0.00	23.24	139.40	(0.00)	139.40
184. Vinyl-faced/laminated insulation - 4"	528.00 SF	1.08	41.70	122.38	734.32	(0.00)	734.32
185. Insulation - ISO board, 1 1/2"	5.28 SQ	233.75	38.30	254.50	1,527.00	(0.00)	1,527.00


William Griffin, PA

William Griffin
128 Poplar St.
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CONTINUED - Front Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
 - See image, IECC Table, in the Images section of this report. Required to meet current IECC requirements for metal buildings							
190. R&R Coiling overhead door, 10' x 10'*	1.00 EA	1,895.96	72.74	393.72	2,362.42	(0.00)	2,362.42
Line item unit price adjusted to reflect current market conditions. Including current shipping rate							
https://www.doorson-line.com/models/commercial							
187. Door Installer/Finish Carpenter - per hour	4.00 HR	57.50	0.00	46.00	276.00	(0.00)	276.00
Additional labor required to install balance and calibrate motors for new overhead doors.							
188. Electrician - per hour	3.00 HR	81.71	0.00	49.02	294.15	(0.00)	294.15
Allowance to detach and reset electrical to replace siding.							
Totals: Front Elevation			240.03	1,475.06	8,850.54	0.00	8,850.54

Right Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
191. Remove Wall/roof panel - corrugated - 26 gauge	450.00 SF	0.71	0.00	63.90	383.40	(0.00)	383.40
192. Wall/roof panel - corrugated - 26 gauge	450.00 SF	3.51	63.18	328.54	1,971.22	(0.00)	1,971.22
193. Remove Metal J trim - metal building	30.00 LF	1.02	0.00	6.12	36.72	(0.00)	36.72
194. Metal J trim - metal building	30.00 LF	4.80	3.42	29.48	176.90	(0.00)	176.90
Line item unit price adjusted to reflect current market conditions.							
https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHFY7ytN9uDwbkPv4KYsAU&oeq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAyBQghEKABMgUIIRCgATIFCCEQoAE6CAgAEKIEELADoggIIRAWEB4QHToKCCEQFhAeEB0QGDofCCEQqwI6BwghEKABEApKBAhBGAFQrA5YmjBgiT1oAXAAeACAAZABiAHGCZIBBDAAuMTCYAQCgAQHIAQHAAQE&scient=products-cc#spd=250132952231869107							
202. R&R Outside/Inside corner - 26 gauge	20.00 LF	7.54	5.89	31.34	188.03	(0.00)	188.03
196. Remove Vinyl-faced/laminated insulation - 4"	450.00 SF	0.22	0.00	19.80	118.80	(0.00)	118.80
197. Vinyl-faced/laminated insulation - 4"	450.00 SF	1.08	35.54	104.30	625.84	(0.00)	625.84
198. Insulation - ISO board, 1 1/2"	4.50 SQ	233.75	32.64	216.90	1,301.42	(0.00)	1,301.42
 - See image, IECC Table, in the Images section of this report. Required to meet current IECC requirements for metal buildings							
201. Electrician - per hour	3.00 HR	81.71	0.00	49.02	294.15	(0.00)	294.15

William Griffin, PA

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CONTINUED - Right Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
Allowance to detach and reset electrical to replace siding.							
Totals: Right Elevation			140.67	849.40	5,096.48	0.00	5,096.48

Rear Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
203. Remove Wall/roof panel - corrugated - 26 gauge	528.00 SF	0.71	0.00	74.98	449.86	(0.00)	449.86
204. Wall/roof panel - corrugated - 26 gauge	528.00 SF	3.51	74.13	385.48	2,312.89	(0.00)	2,312.89
205. Remove Metal J trim - metal building	30.00 LF	1.02	0.00	6.12	36.72	(0.00)	36.72
206. Metal J trim - metal building	30.00 LF	4.80	3.42	29.48	176.90	(0.00)	176.90
Line item unit price adjusted to reflect current market conditions.							

https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHfY7ytN9uDwbkPv4KYsAU&oq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAyBQghEKABMgUIIRCgATIFCCEQoAE6CAgAEKIEELADoggIIRAWEB4QHToKCCEQFhAeEB0QGDofCCEQqwI6BwghEKABEApKBahBGAfQrA5YmjBgiT1oAXAAeACAAZABiAHGCZIBBDaUmtCYAQcGqAHIAQHAAQE&sclient=products-cc#spd=250132952231869107

207. R&R Wrap wood garage door frame & trim with aluminum (PER LF)	30.00 LF	14.70	9.74	90.14	540.88	(0.00)	540.88
208. Remove Vinyl-faced/laminated insulation - 4"	528.00 SF	0.22	0.00	23.24	139.40	(0.00)	139.40
209. Vinyl-faced/laminated insulation - 4"	528.00 SF	1.08	41.70	122.38	734.32	(0.00)	734.32
210. Insulation - ISO board, 1 1/2"	5.28 SQ	233.75	38.30	254.50	1,527.00	(0.00)	1,527.00



- See image, IECC Table, in the Images section of this report.

Required to meet current IECC requirements for metal buildings

211. Electrician - per hour	3.00 HR	81.71	0.00	49.02	294.15	(0.00)	294.15
Allowance to detach and reset electrical to replace siding.							

Totals: Rear Elevation			167.29	1,035.34	6,212.12	0.00	6,212.12
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Left Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
212. Remove Wall/roof panel - corrugated - 26 gauge	450.00 SF	0.71	0.00	63.90	383.40	(0.00)	383.40

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CONTINUED - Left Elevation

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
213. Wall/roof panel - corrugated - 26 gauge	450.00 SF	3.51	63.18	328.54	1,971.22	(0.00)	1,971.22
214. Remove Metal J trim - metal building	30.00 LF	1.02	0.00	6.12	36.72	(0.00)	36.72
215. Metal J trim - metal building	30.00 LF	4.80	3.42	29.48	176.90	(0.00)	176.90
Line item unit price adjusted to reflect current market conditions.							
https://www.google.com/search?q=j+trim+metal+building+baked+enamel&sa=X&biw=1920&bih=904&tbm=shop&ei=-fHFY7ytN9uDwbkPv4KYsAU&oeq=j+trim+metal+building+baked+enam&gs_lcp=Cgtwcm9kdWN0cy1jYxADGAAYBQghEKABMgUIIRCgATIFCCEQoAE6CAgAEKIEELADOggIIRAWEB4QHToKCCEQFhAeEB0QGDoFCCEQqwI6BwghEKABEApKBahBGAFQrA5YmjBgiT1oAXAAeACAAZABiAHGCZIBBDaUMTCYAQCgAQHIAQHAAQE&sclient=products-cc#spd=250132952231869107							
216. R&R Outside/Inside corner - 26 gauge	20.00 LF	7.54	5.89	31.34	188.03	(0.00)	188.03
217. Remove Vinyl-faced/laminated insulation - 4"	450.00 SF	0.22	0.00	19.80	118.80	(0.00)	118.80
218. Vinyl-faced/laminated insulation - 4"	450.00 SF	1.08	35.54	104.30	625.84	(0.00)	625.84
219. Insulation - ISO board, 1 1/2"	4.50 SQ	233.75	32.64	216.90	1,301.42	(0.00)	1,301.42
 - See image, IECC Table, in the Images section of this report. Required to meet current IECC requirements for metal buildings							
220. Electrician - per hour	3.00 HR	81.71	0.00	49.02	294.15	(0.00)	294.15
Allowance to detach and reset electrical to replace siding.							
Totals: Left Elevation			140.67	849.40	5,096.48	0.00	5,096.48
Total: Detached Garage			1,044.40	5,943.00	35,658.40	0.00	35,658.40

Labor Minimums Applied

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
79. Temporary repair services labor minimum	1.00 EA	19.76	0.00	3.96	23.72	(0.00)	23.72
80. Plumbing labor minimum	1.00 EA	209.41	0.00	41.88	251.29	(0.00)	251.29
132. Misc. Equipment - Commercial labor min	1.00 EA	151.48	0.00	30.30	181.78	(0.00)	181.78
Totals: Labor Minimums Applied			0.00	76.14	456.79	0.00	456.79
Line Item Totals: 2579_N9THAVE			10,332.67	84,787.58	568,925.09	0.00	568,925.09

William Griffin, PA

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 128 Poplar St.
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Grand Total Areas:

480.00 SF Walls	225.00 SF Ceiling	705.00 SF Walls and Ceiling
225.00 SF Floor	25.00 SY Flooring	60.00 LF Floor Perimeter
0.00 SF Long Wall	0.00 SF Short Wall	60.00 LF Ceil. Perimeter
225.00 Floor Area	245.44 Total Area	480.00 Interior Wall Area
1,924.20 Exterior Wall Area	62.67 Exterior Perimeter of Walls	
7,155.15 Surface Area	71.55 Number of Squares	444.42 Total Perimeter Length
133.00 Total Ridge Length	0.00 Total Hip Length	

Coverage	Item Total	%	ACV Total	%
Dwelling	501,684.93	88.18%	501,684.93	88.18%
Other Structures	7,040.16	1.24%	7,040.16	1.24%
Contents	60,200.00	10.58%	60,200.00	10.58%
Total	568,925.09	100.00%	568,925.09	100.00%

William Griffin, PA

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Gadsden, TN 38337
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Summary for Dwelling

Line Item Total	407,738.04
Material Sales Tax	10,315.54
Storage Rental Tax	17.13
	<hr/>
Subtotal	418,070.71
Overhead	41,807.11
Profit	41,807.11
	<hr/>
Replacement Cost Value	\$501,684.93
Net Claim	\$501,684.93
	<hr/> <hr/>

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Summary for Other Structures

Line Item Total	5,866.80
Overhead	586.68
Profit	586.68
	<hr/>
Replacement Cost Value	\$7,040.16
Net Claim	\$7,040.16
	<hr/> <hr/>

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Summary for Contents

Line Item Total	60,200.00
Replacement Cost Value	\$60,200.00
Net Claim	\$60,200.00

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 128 Poplar St.
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Recap of Taxes, Overhead and Profit

	Overhead (10%)	Profit (10%)	Material Sales Tax (9.75%)	P Ppty Material Tax (9.75%)	P Ppty Cleaning Tax (9.75%)	Storage Rental Tax (9.75%)	Food Tax (7.75%)
Line Items							
	42,393.79	42,393.79	10,315.54	0.00	0.00	17.13	0.00
Total	42,393.79	42,393.79	10,315.54	0.00	0.00	17.13	0.00

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 731-420-1402

Recap by Room**Estimate: 2579_N9THAVE**

General Conditions			47,950.10	10.12%
Coverage: Dwelling	100.00% =		47,950.10	
OSHA			50,388.28	10.63%
Coverage: Dwelling	100.00% =		50,388.28	
Emergency Repairs			15,200.00	3.21%
Coverage: Dwelling	100.00% =		15,200.00	
Debris Removal			10,850.08	2.29%
Coverage: Dwelling	100.00% =		10,850.08	
Pollutant Clean Up			24,437.94	5.16%
Coverage: Dwelling	100.00% =		24,437.94	
Business Personal Property			60,200.00	12.71%
Coverage: Contents	100.00% =		60,200.00	

Area: 2579_9th

Building 2 Roof			61,682.74	13.02%
Coverage: Dwelling	100.00% =		61,682.74	
Front Elevation			27,540.26	5.81%
Coverage: Dwelling	100.00% =		27,540.26	
Right Elevation			14,549.54	3.07%
Coverage: Dwelling	100.00% =		14,549.54	
Rear Elevation			30,105.82	6.35%
Coverage: Dwelling	100.00% =		30,105.82	

Area: Interior

Office			14,500.00	3.06%
Coverage: Dwelling	100.00% =		14,500.00	

Area Subtotal: Interior

Coverage: Dwelling	100.00% =		14,500.00	
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Area: Interior

Coverage: Dwelling	100.00% =		24,630.54	5.20%
Wall Panels			62,717.89	13.24%
Coverage: Dwelling	90.65% =		56,851.09	
Coverage: Other Structures	9.35% =		5,866.80	

Area Subtotal: Interior

Coverage: Dwelling	93.28% =		81,481.63	
Coverage: Other Structures	6.72% =		5,866.80	

Area Subtotal: 2579_9th

			235,726.79	49.75%
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William Griffin, PA

William Griffin
 128 Poplar St.
 Gadsden, TN 38337
 731-420-1402

Coverage: Dwelling	97.51% =	229,859.99
Coverage: Other Structures	2.49% =	5,866.80

Area: Detached Garage**Roof1**

		8,313.24	1.75%
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Coverage: Dwelling	100.00% =	8,313.24
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Front Elevation

		7,135.45	1.51%
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Coverage: Dwelling	100.00% =	7,135.45
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Right Elevation

		4,106.41	0.87%
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Coverage: Dwelling	100.00% =	4,106.41
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Rear Elevation

		5,009.49	1.06%
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Coverage: Dwelling	100.00% =	5,009.49
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Left Elevation

		4,106.41	0.87%
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Coverage: Dwelling	100.00% =	4,106.41
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Area Subtotal: Detached Garage

		28,671.00	6.05%
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Coverage: Dwelling	100.00% =	28,671.00
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Labor Minimums Applied

		380.65	0.08%
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Coverage: Dwelling	100.00% =	380.65
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Subtotal of Areas

		473,804.84	100.00%
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Coverage: Dwelling	86.06% =	407,738.04
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Coverage: Other Structures	1.24% =	5,866.80
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Coverage: Contents	12.71% =	60,200.00
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Total

		473,804.84	100.00%
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William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

SCHROCKS ROOFING

63716 Hwy 67
Brock Ne 68320
Phone 402-414-2110

J & S Welding
2579 N 9th Ave
Humboldt TN 38343

4779

INVOICE

INVOICE No 356
DATE: May 27, 2022

SALESPERSON	P.O. NUMBER	SENT DATE	SENT VIA	F.O.B. POINT	TERMS
Titus					

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
	Roof Repair – Seal And Coating		
	Labor And Materials		\$15,200.00
		SUBTOTAL	
		SALES TAX	
		P&P	
		TOTAL DUE	\$15,200.00

Make all cheques payable to SCHROCKS ROOFING
If you have any questions concerning this invoice, contact Titus Schrock 402-414-2110
schrockcommercialroofing@gmail.com

THANK YOU FOR YOUR BUSINESS!

Emergency Repair Invoice

Taken By: William Griffin

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

2018 International Energy Conservation Code (IECC) Basic Upgrade to Premium																First Version: Aug 2017	
CHAPTER 4 [5E] COMMERCIAL ENERGY EFFICIENCY																	
CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8		
	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	
Roofs																	
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci	
Metal buildings ¹	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49	
Walls, above grade																	
Mass ²	R-5 7ci ²	R-5 7ci ²	R-5 7ci ²	R-7 6ci	R-7 6ci	R-9 5ci	R-9 5ci	R-11 4ci	R-11 4ci	R-13 3ci	R-13 3ci	R-15 2ci	R-15 2ci	R-15 2ci	R-25ci	R-25ci	
Metal building	R-13+ R-6 5ci	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-19 5ci	R-13 + R-13ci	R-13+ R-19 5ci	
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-15 6ci	R-13 + R-7 5ci	R-13+ R-17 5ci	
Wood framed and other	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-15 6ci or R-20 + R-10ci	R-13 + R-15 6ci or R-20 + R-10ci	
Walls, below grade																	
Below-grade wall ³	NR	NR	NR	NR	NR	NR	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-10ci	R-10ci	R-10ci	R-12 5ci	
Floors																	
Mass ²	NR	NR	R-8 3ci	R-8 3ci	R-10ci	R-10ci	R-10ci	R-10 4ci	R-10ci	R-12 5ci	R-12 5ci	R-12 5ci	R-15ci	R-16 7ci	R-15ci	R-16 7ci	
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	
Slab-on-grade floors																	
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below	
Heated slabs ¹	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	
Opaque doors																	
Nonsewing	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	

¹ For 50, 1 inch = 25.4 mm; 1 pound per square foot = 4.88 kg/m²; 1 pound per cubic foot = 16 kg/m³.

² R-Values are in SI units. R-Value is the reciprocal of U-Value. R-Value is the reciprocal of U-Value.

3

IECC Table

Required to meet current IECC requirements for metal buildings

Taken By: William Griffin

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

2018 International Energy Conservation Code (IECC) BASIC Upgrade to Premium																First Version: Aug 2017	
CHAPTER 4 [5E] COMMERCIAL ENERGY EFFICIENCY																	
CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8		
	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	
Roofs																	
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci	
Metal buildings ¹	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49	
Walls, above grade																	
Mass ²	R-5 7ci ³	R-5 7ci ³	R-5 7ci ³	R-7 6ci	R-7 6ci	R-9 5ci	R-9 5ci	R-11 4ci	R-11 4ci	R-13 3ci	R-13 3ci	R-15 2ci	R-15 2ci	R-15 2ci	R-25ci	R-25ci	
Metal building	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-19 5ci	R-13 + R-13ci	R-13 + R-19 5ci	
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-15 6ci	R-13 + R-7 5ci	R-13 + R-17 5ci	
Wood framed and other	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-15 6ci or R-20 + R-10ci	R-13 + R-15 6ci or R-20 + R-10ci	
Walls, below grade																	
Below-grade wall ³	NR	NR	NR	NR	NR	NR	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-10ci	R-10ci	R-10ci	R-12 5ci	
Floors																	
Mass ²	NR	NR	R-8 3ci	R-8 3ci	R-10ci	R-10ci	R-10ci	R-10 4ci	R-10ci	R-12 5ci	R-12 5ci	R-12 5ci	R-15ci	R-16 7ci	R-15ci	R-16 7ci	
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	
Slab-on-grade floors																	
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below	
Heated slabs ¹	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	
Opaque doors																	
Nonsewing	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	

For R-5: 1 inch = 26.4 mm; 1 pound per square foot = 4.88 kg/m²; 1 pound per cubic foot = 16 kg/m³.

¹ For Metal buildings below: R-19 + R-11 LS (minimum); R-19 + R-11 LS (maximum).

¹ For 50, 1 inch = 25.4 mm, 1 pound per square foot = 4.88 kg/m², 1 pound per cubic foot = 16 kg/m³.

² R-Values are in SI units. R-10 = 10 ft²·h·ft/Btu.

4

IECC Table

Required to meet current IECC requirements for metal buildings

Taken By: William Griffin

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

2018 International Energy Conservation Code (IECC) Basic Upgrade to Premium																First Version: Aug 2017	
CHAPTER 4 (04) COMMERCIAL ENERGY EFFICIENCY																	
CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8		
	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	
Roofs																	
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci	
Metal buildings ¹	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49	
Walls, above grade																	
Mass ²	R-5 7ci ²	R-5 7ci ²	R-5 7ci ²	R-7 6ci	R-7 6ci	R-9 5ci	R-9 5ci	R-11 4ci	R-11 4ci	R-13 3ci	R-13 3ci	R-15 2ci	R-15 2ci	R-15 2ci	R-25ci	R-25ci	
Metal building	R-13+ R-6 5ci	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-19 5ci	R-13 + R-13ci	R-13+ R-19 5ci	
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-15 6ci	R-13 + R-7 5ci	R-13+ R-17 5ci	
Wood framed and other	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-15 6ci or R-20 + R-10ci	R-13 + R-15 6ci or R-20 + R-10ci	
Walls, below grade																	
Below-grade wall ³	NR	NR	NR	NR	NR	NR	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-10ci	R-10ci	R-10ci	R-12 5ci	
Floors																	
Mass ²	NR	NR	R-8 3ci	R-8 3ci	R-10ci	R-10ci	R-10ci	R-10 4ci	R-10ci	R-12 5ci	R-12 5ci	R-12 5ci	R-15ci	R-16 7ci	R-15ci	R-16 7ci	
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30 ³	R-30 ³	R-30 ³	R-30 ³	
Slab-on-grade floors																	
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below	
Heated slabs ¹	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	
Opaque doors																	
Nonswinging	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	

¹ For 50, 1 inch = 25.4 mm, 1 pound per square foot = 4.88 kg/m², 1 pound per cubic foot = 16 kg/m³.

² R-Values are in SI units. R-10 = 10 m²·K/W.

5 IECC Table
Required to meet current IECC requirements for metal buildings

Taken By: William Griffin

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

2018 International Energy Conservation Code (IECC) Basic Upgrade to Premium																First Version: Aug 2017	
CHAPTER 4 [5E] COMMERCIAL ENERGY EFFICIENCY																	
CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8		
	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	
Roofs																	
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci	
Metal buildings ¹	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49	
Walls, above grade																	
Mass ²	R-5 7ci ²	R-5 7ci ²	R-5 7ci ²	R-7 6ci	R-7 6ci	R-9 5ci	R-9 5ci	R-11 4ci	R-11 4ci	R-13 3ci	R-13 3ci	R-15 2ci	R-15 2ci	R-15 2ci	R-25ci	R-25ci	
Metal building	R-13+ R-6 5ci	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-19 5ci	R-13 + R-13ci	R-13+ R-19 5ci	
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-15 6ci	R-13 + R-7 5ci	R-13+ R-17 5ci	
Wood framed and other	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-15 6ci or R-20 + R-10ci	R-13 + R-15 6ci or R-20 + R-10ci	
Walls, below grade																	
Below-grade wall ³	NR	NR	NR	NR	NR	NR	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-10ci	R-10ci	R-10ci	R-12 5ci	
Floors																	
Mass ²	NR	NR	R-8 3ci	R-8 3ci	R-10ci	R-10ci	R-10ci	R-10 4ci	R-10ci	R-12 5ci	R-12 5ci	R-12 5ci	R-15ci	R-16 7ci	R-15ci	R-16 7ci	
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	
Slab-on-grade floors																	
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below	
Heated slabs ¹	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	
Opaque doors																	
Nonsewing	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	

¹ For 50, 1 inch = 25.4 mm, 1 pound per square foot = 4.88 kg/m², 1 pound per cubic foot = 16 kg/m³.

² R-Values are in SI units. R-Value is the reciprocal of U-Value. R-Value is the reciprocal of U-Value.

6

IECC Table

Required to meet current IECC requirements for metal buildings

Taken By: William Griffin

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

2018 International Energy Conservation Code (IECC) BASIC Upgrade to Premium																First Version: Aug 2017	
CHAPTER 4 [5E] COMMERCIAL ENERGY EFFICIENCY																	
CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8		
	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	
Roofs																	
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci	
Metal buildings ¹	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49	
Walls, above grade																	
Mass ²	R-5 7ci ²	R-5 7ci ²	R-5 7ci ²	R-7 6ci	R-7 6ci	R-9 5ci	R-9 5ci	R-11 4ci	R-11 4ci	R-13 3ci	R-13 3ci	R-15 2ci	R-15 2ci	R-15 2ci	R-25ci	R-25ci	
Metal building	R-13+ R-6 5ci	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-19 5ci	R-13 + R-13ci	R-13+ R-19 5ci	
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-15 6ci	R-13 + R-7 5ci	R-13+ R-17 5ci	
Wood framed and other	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-15 6ci or R-20 + R-10ci	R-13 + R-15 6ci or R-20 + R-10ci	
Walls, below grade																	
Below-grade wall ³	NR	NR	NR	NR	NR	NR	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-10ci	R-10ci	R-10ci	R-12 5ci	
Floors																	
Mass ²	NR	NR	R-6 3ci	R-8 3ci	R-10ci	R-10ci	R-10ci	R-10 4ci	R-10ci	R-12 5ci	R-12 5ci	R-12 5ci	R-15ci	R-16 7ci	R-15ci	R-16 7ci	
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	
Slab-on-grade floors																	
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below	
Heated slabs ¹	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	
Opaque doors																	
Nonsewing	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	

¹ For 50, 1 inch = 25.4 mm; 1 pound per square foot = 4.88 kg/m²; 1 pound per cubic foot = 16 kg/m³.

² R-Values are in SI units. R-Value is the reciprocal of U-Value. R-Value is the reciprocal of U-Value.

7

IECC Table

Required to meet current IECC requirements for metal buildings

Taken By: William Griffin

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

2018 International Energy Conservation Code (IECC) Basic Upgrade to Premium																First Version: Aug 2017	
CHAPTER 4 (04) COMMERCIAL ENERGY EFFICIENCY																	
CLIMATE ZONE	1		2		3		4 EXCEPT MARINE		5 AND MARINE 4		6		7		8		
	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	All other	Group R	
Roofs																	
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci	R-25ci	R-25ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-30ci	R-35ci	R-35ci	R-35ci	R-35ci	
Metal buildings ¹	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R-11 LS	R-25 + R-11 LS	R-25 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	R-30 + R-11 LS	
Attic and other	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-38	R-49	R-49	R-49	R-49	R-49	R-49	R-49	
Walls, above grade																	
Mass ²	R-5 7ci ²	R-5 7ci ²	R-5 7ci ²	R-7 6ci	R-7 6ci	R-9 5ci	R-9 5ci	R-11 4ci	R-11 4ci	R-13 3ci	R-13 3ci	R-15 2ci	R-15 2ci	R-15 2ci	R-25ci	R-25ci	
Metal building	R-13+ R-6 5ci	R-13 + R-6 5ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-6 5ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13 + R-13ci	R-13+ R-19 5ci	R-13 + R-13ci	R-13+ R-19 5ci	
Metal framed	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-7 5ci	R-13 + R-15 6ci	R-13 + R-7 5ci	R-13+ R-17 5ci	
Wood framed and other	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-3 8ci or R-20	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-7 5ci or R-20 + R-3 8ci	R-13 + R-15 6ci or R-20 + R-10ci	R-13 + R-15 6ci or R-20 + R-10ci	
Walls, below grade																	
Below-grade wall ³	NR	NR	NR	NR	NR	NR	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-7 5ci	R-10ci	R-10ci	R-10ci	R-12 5ci	
Floors																	
Mass ²	NR	NR	R-8 3ci	R-8 3ci	R-10ci	R-10ci	R-10ci	R-10 4ci	R-10ci	R-12 5ci	R-12 5ci	R-12 5ci	R-15ci	R-16 7ci	R-15ci	R-16 7ci	
Joist/framing	NR	NR	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	R-30 ⁴	
Slab-on-grade floors																	
Unheated slabs	NR	NR	NR	NR	NR	NR	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-10 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-15 for 24" below	R-20 for 24" below	
Heated slabs ¹	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-7.5 for 12" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-10 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 24" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-15 for 36" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	R-20 for 48" below + R-5 full slab	
Opaque doors																	
Nonsewing	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	R-4.75	

¹ For 30, 1 inch = 25.4 mm; 1 pound per square foot = 4.88 kg/m²; 1 pound per cubic foot = 16 kg/m³.

² R-Values are based on 159 mm (6.25 in.) R-Value for concrete and 100 mm (4 in.) R-Value for masonry.

8

IECC Table

Required to meet current IECC requirements for metal buildings

Taken By: William Griffin

William Griffin, PA

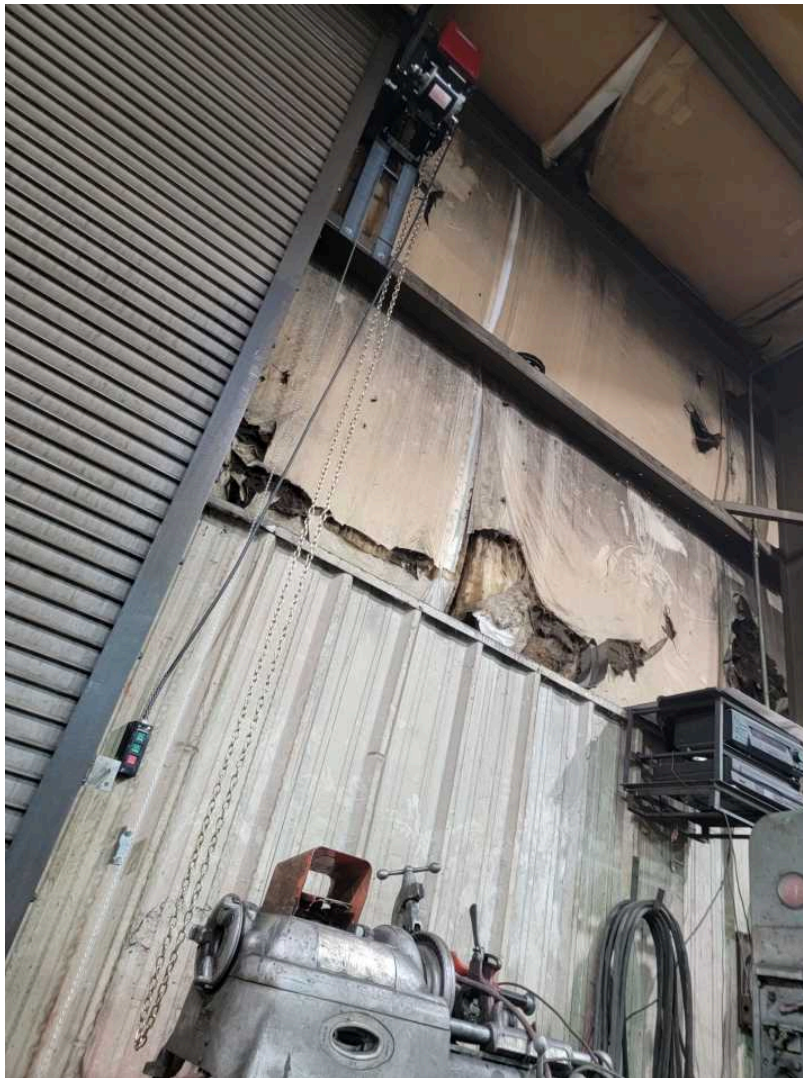
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



9 1-Pic 1 (9)

William Griffin, PA

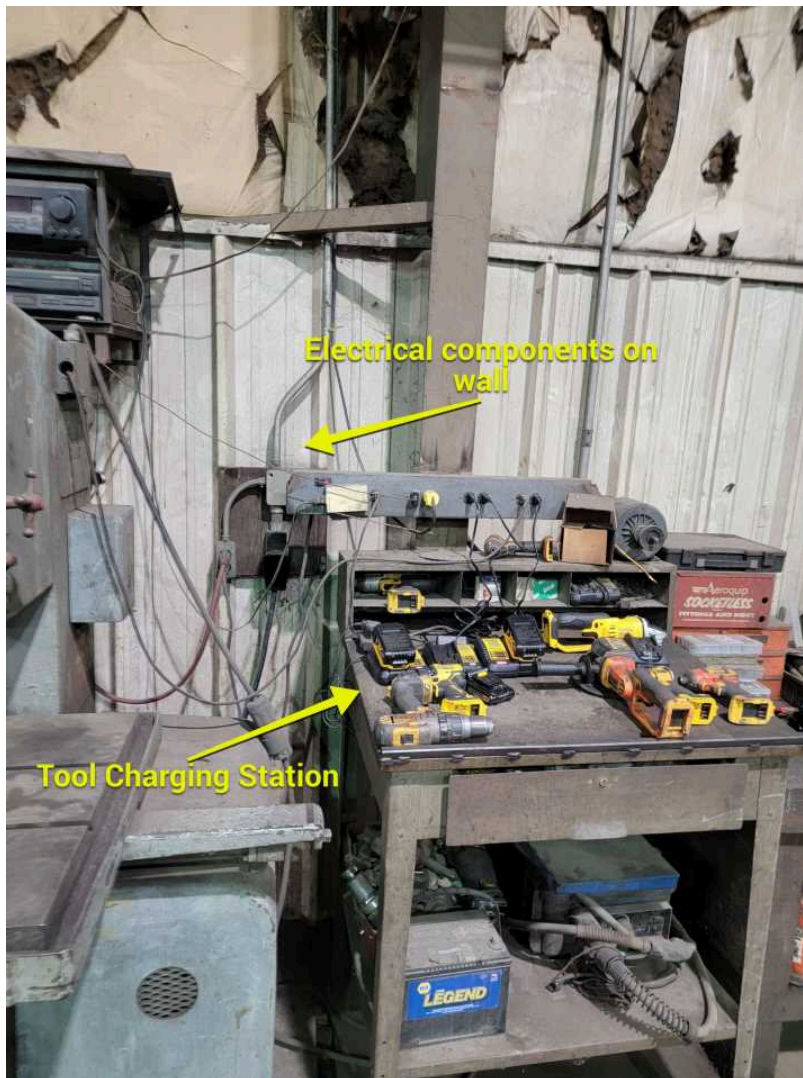
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



10 2-Pic 1 (10)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



11 3-Pic 1 (11)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



12 4-Pic 1 (12)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



13 5-Pic 1 (13)

William Griffin, PA

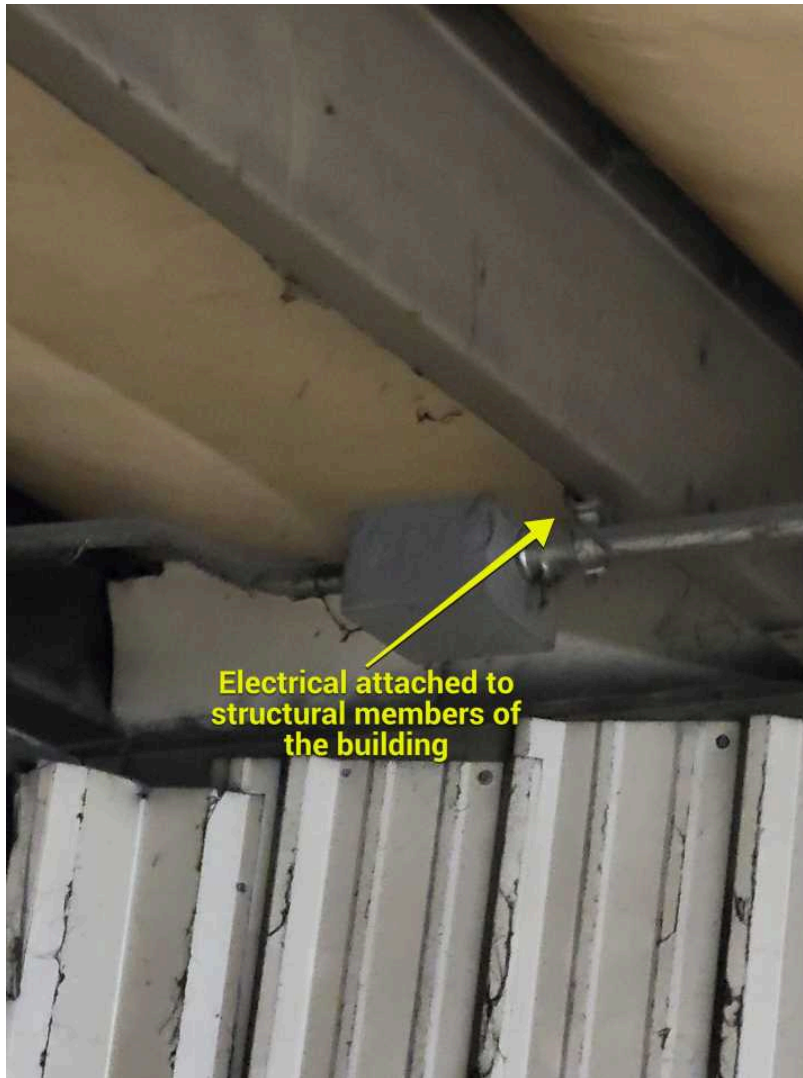
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



14 6-Pic 1 (14)

William Griffin, PA

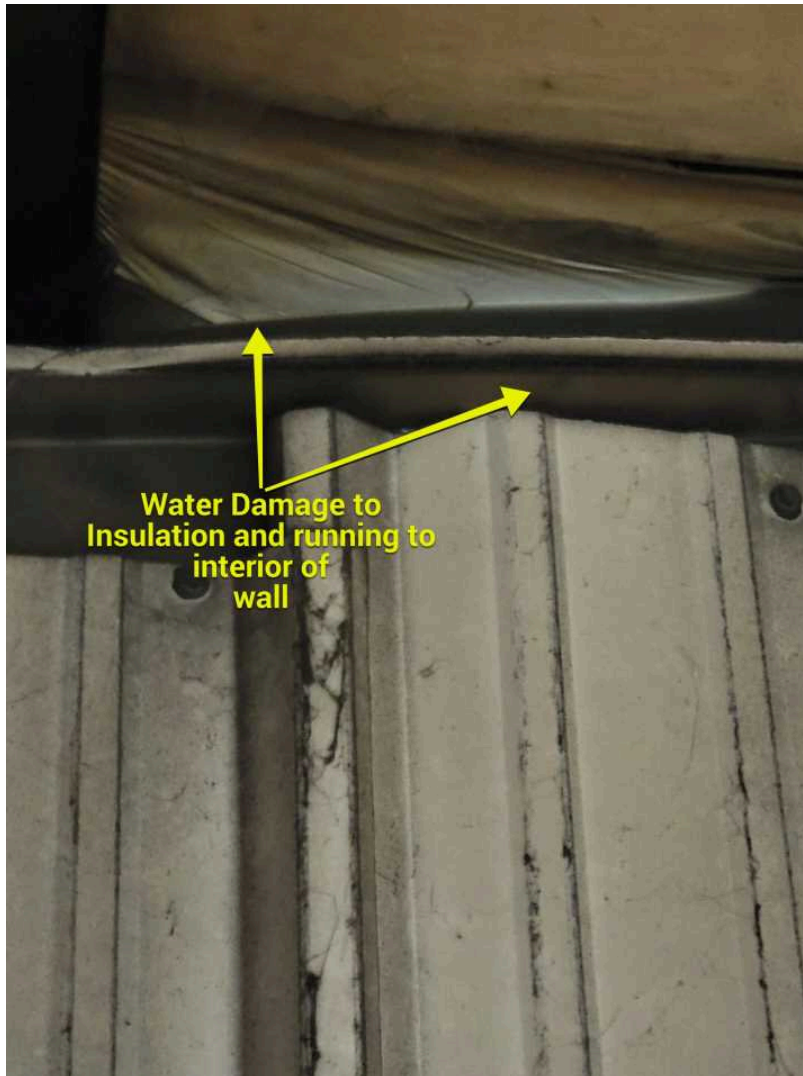
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



15 7-Pic 1 (15)

William Griffin, PA

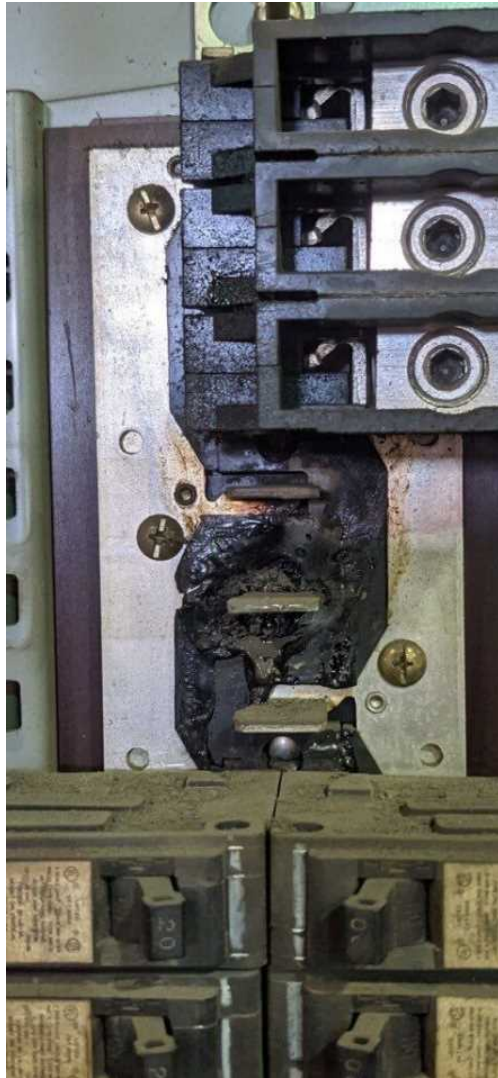
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



16 8-Pic 1 (16)

William Griffin, PA

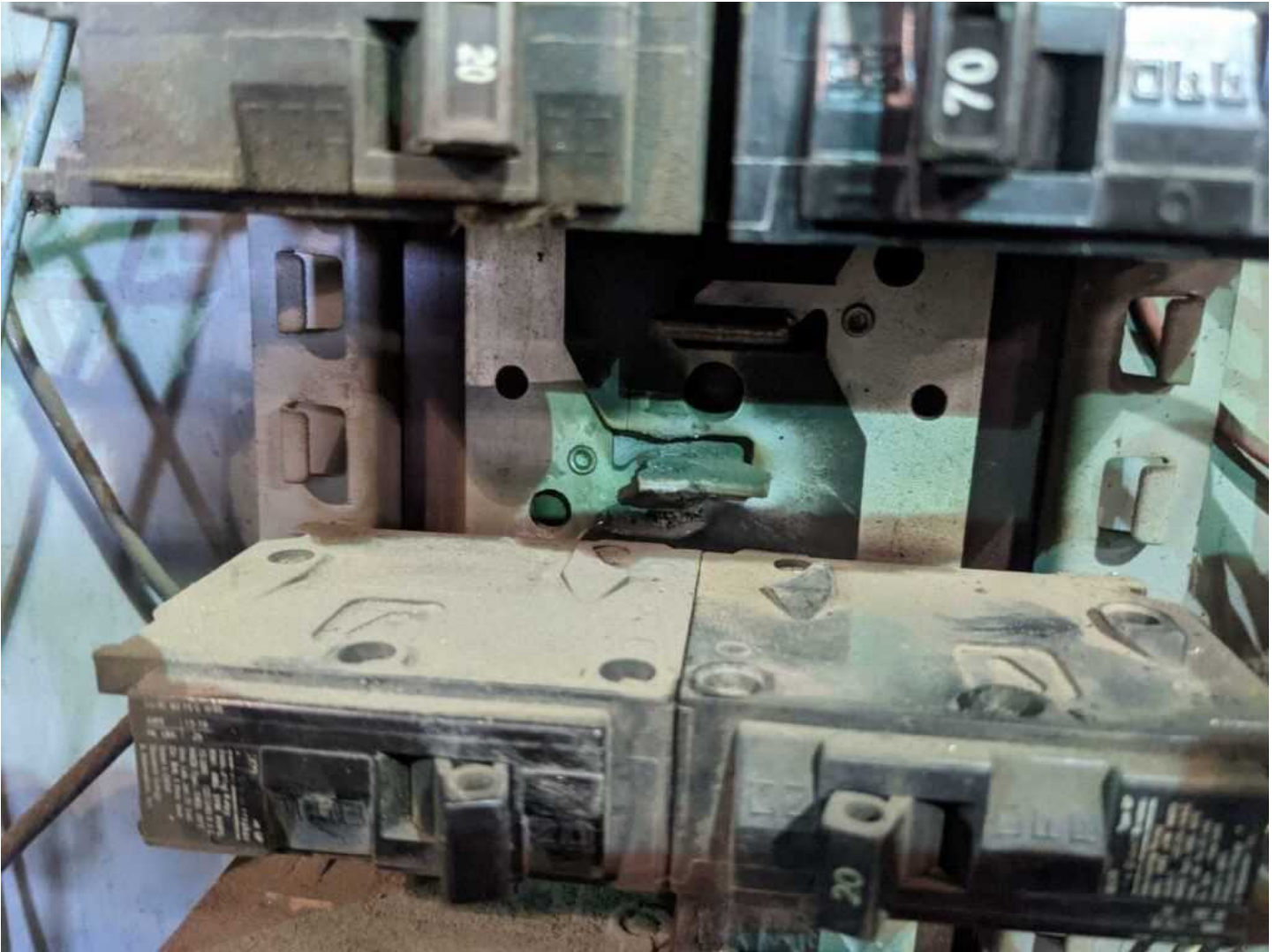
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



17 9-Pic 1 (1)

William Griffin, PA

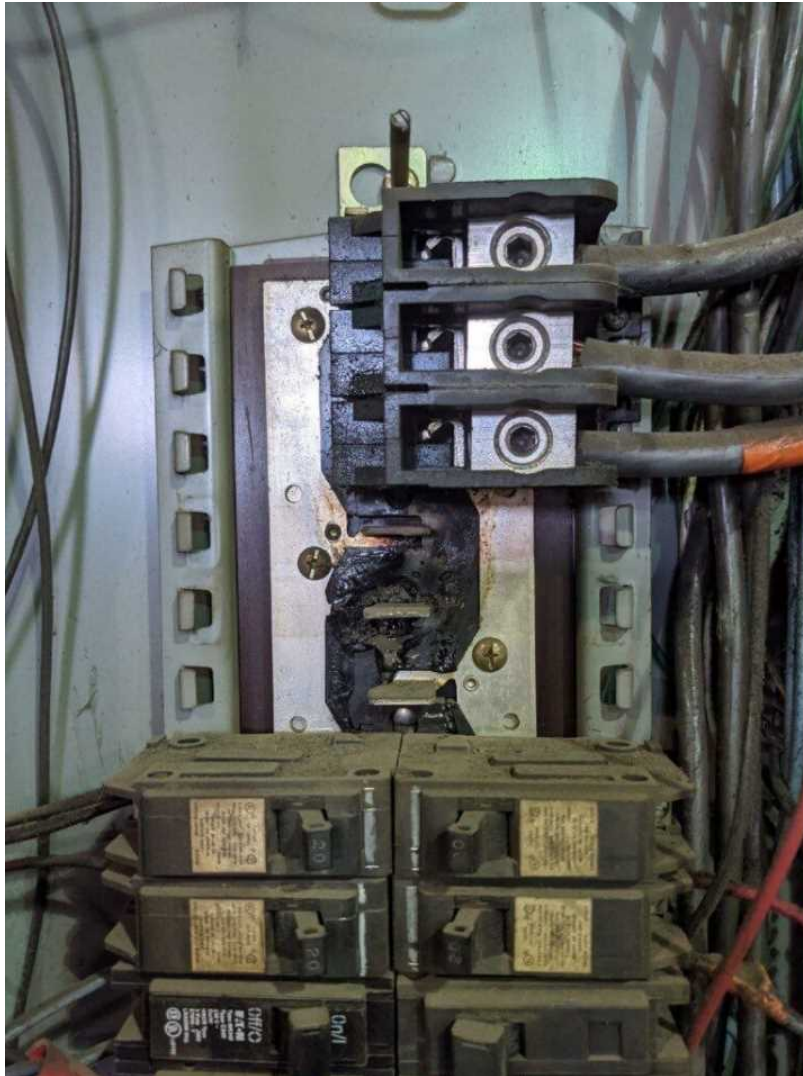
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



18 10-Pic 1 (2)

William Griffin, PA

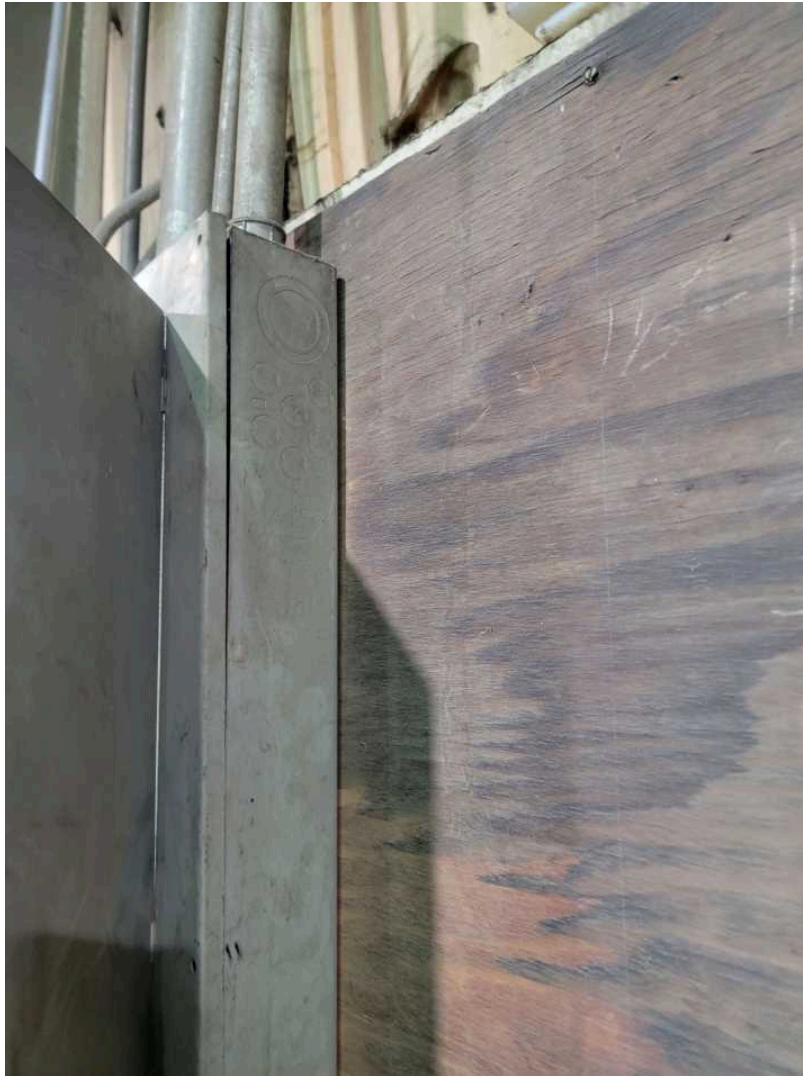
William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



19 11-Pic 1 (3)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



20 12-Pic 1 (4)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



21 13-Pic 1 (5)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



22 14-Pic 1 (6)

William Griffin, PA

William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402



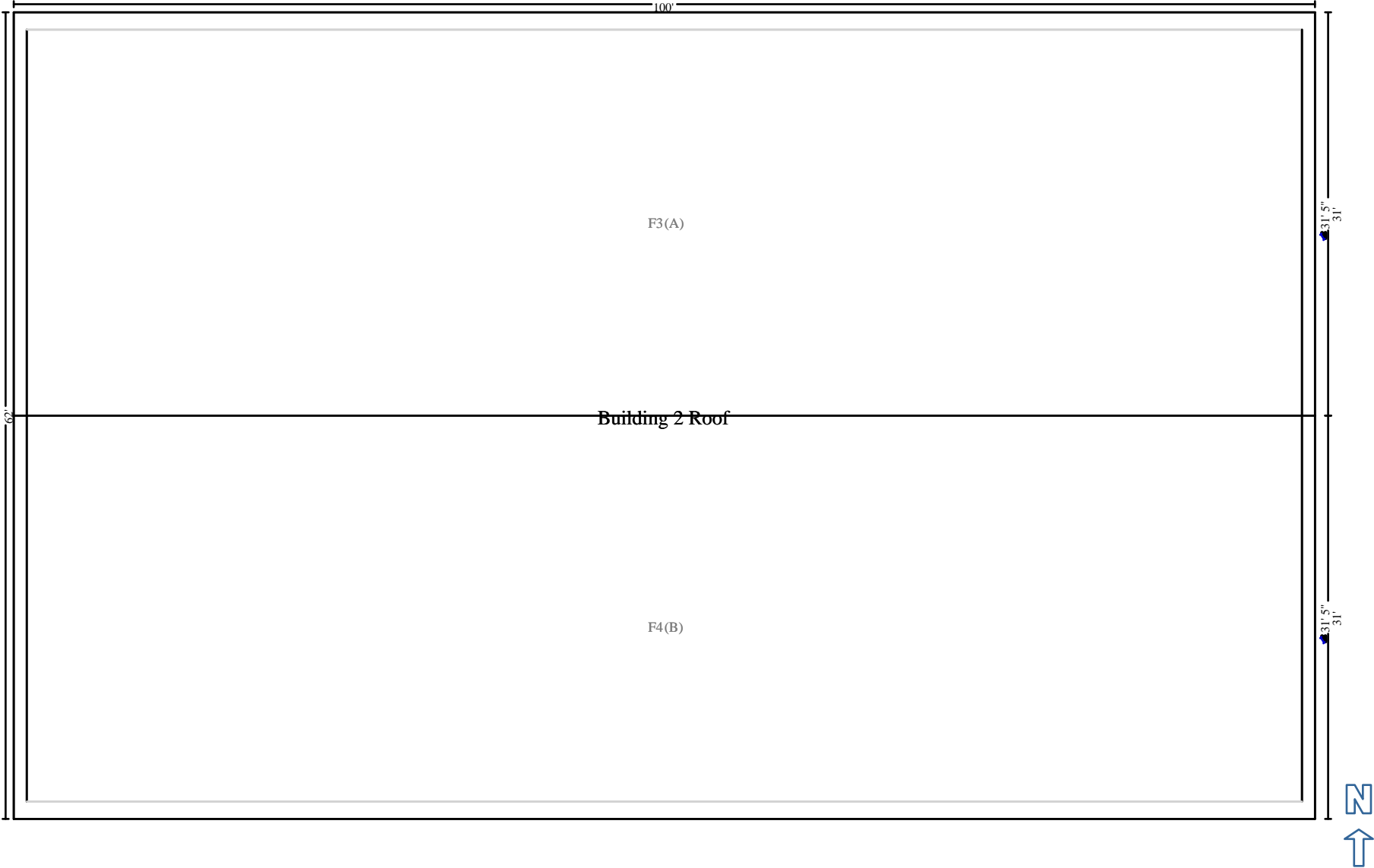
23 15-Pic 1 (7)

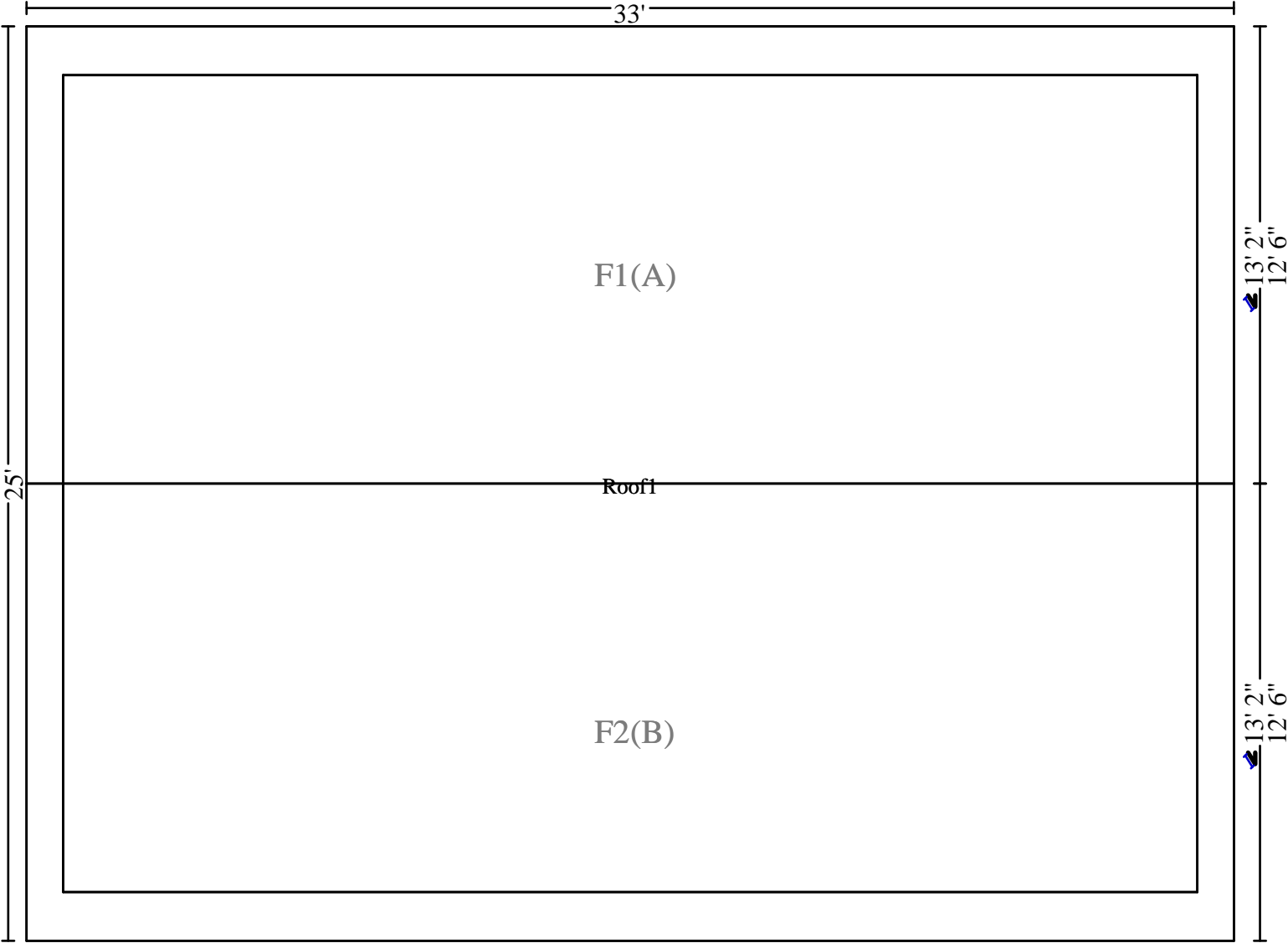
William Griffin, PA

William Griffin
128 Poplar St.
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731-420-1402

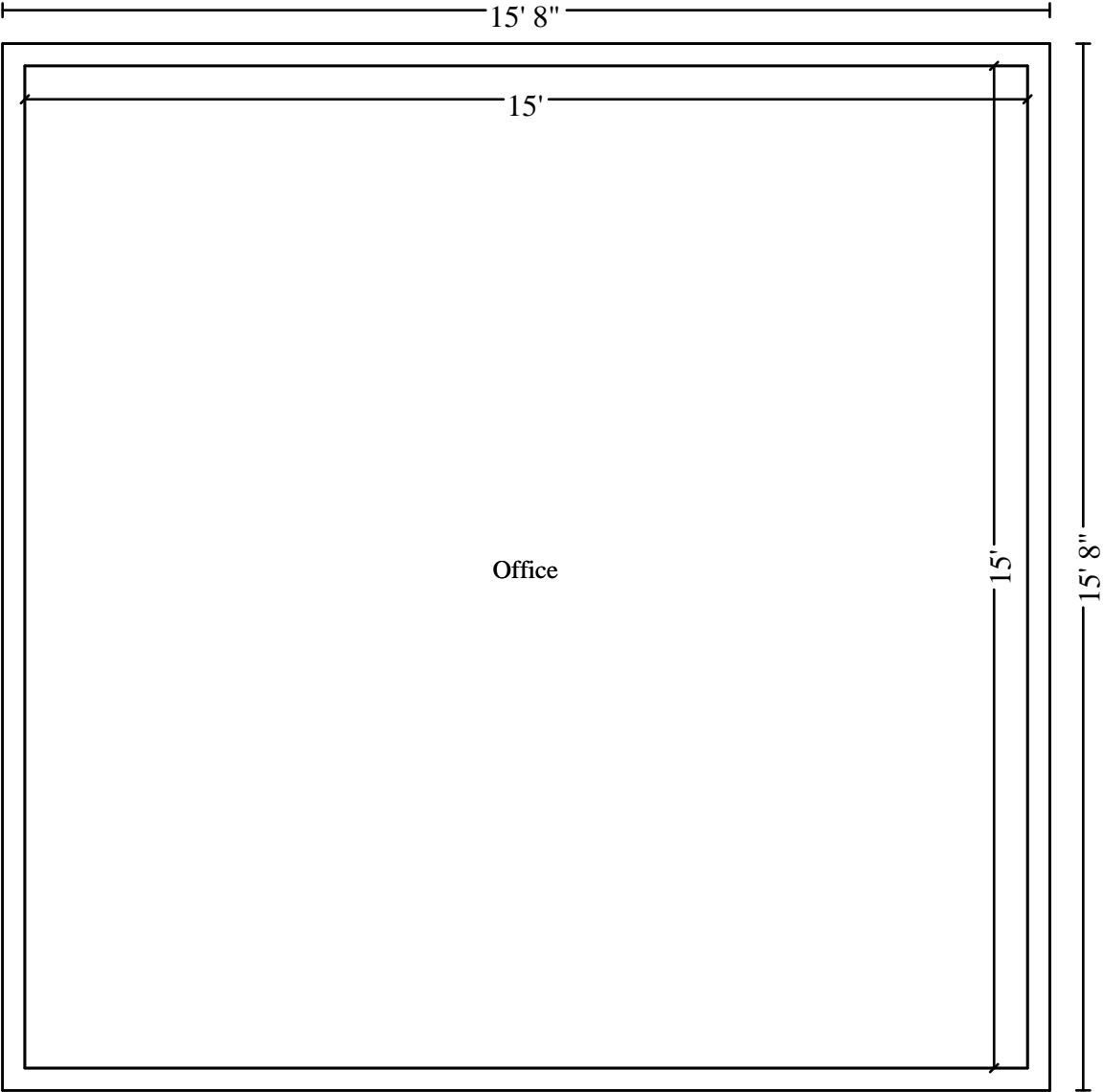


24 16-Pic 1 (8)





Detached Garage



William Griffin
128 Poplar St.
Gadsden, TN 38337
731-420-1402

Sketch Roof Annotations

2579_9th

Face	Square Feet	Number of Squares	Slope - Rise / 12
F3	3,142.76	31.43	2.00
F4	3,142.76	31.43	2.00
Estimated Total:	6,285.52	62.86	

Detached Garage

Face	Square Feet	Number of Squares	Slope - Rise / 12
F1	434.81	4.35	4.00
F2	434.81	4.35	4.00
Estimated Total:	869.63	8.70	